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# PATENT ABSTRACTS OF JAPAN

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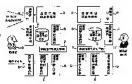
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# (54) COMMUNICATION METHOD AND ITS DEVICE

# (57)Abstract:

PURPOSE: To provide a communication method and its device in which undesired hindrance to a called party is prevented by allowing a caller to select a most proper communication means.

CONSTITUTION: In the communication system having plural network interfaces for a telephone system, a video telephone system a facsimile equipment, an electronic mail and a voice mail or the like, communication means available for each person are registered in advance in a communication means registration section 1, a caller acquires a communication means registered in a called device by a called party communication means acquisition section 5 prior to transmission of a communication content, then a communication means



selection section 9 provides the communication means available for both the caller and the called party for the caller and the caller uses the communication means section means 9 to select any of the available communication means.

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#### CLAIMS

# [Claim(s)]

[Claim 1]In a correspondence procedure using a communication apparatus which has two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, Information on an usable means of communication is registered into a communication apparatus a priori by origination side and a destination side, A correspondence procedure an origination side's obtaining information on an usable means of communication in advance of dispatch of a communication content by a destination side, both an origination side and a destination side showing an addresser information on an usable means of communication, and an addresser's choosing either among shown means of communication, and sending a communication content.

[Claim 2]A communication apparatus which has two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, comprising:

A means-of-communication registration means to register information on an usable means of communication a priori by origination side and a destination side.

an origination side obtains information on an usable means of communication in advance of dispatch of a communication content through a means-of-communication registration means by a destination side -- wearing -- a side means-of-communication acquiring means.

A means-of-communication selecting means which it wears, and both an origination side and a destination side show an addresser an usable means of communication, and an addresser chooses either among shown means of communication based on acquiring information of a side means-of-communication acquiring means, and sends a communication content.

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# DETAILED DESCRIPTION

# [Detailed Description of the Invention] [0001]

[Industrial Application] In this invention, an addresser gets to know a means of communication usable in an action addressee before dispatch of a communication content about the correspondence procedure performed using a communication apparatus with two or more network interfaces, and its device.

Therefore, it is related with the correspondence procedure which enabled it to choose the means of communication which was most suitable for the communication content which an addresser is trying to perform, and its device.

# [0002]

[Description of the Prior Art]In the communication performed using a communication apparatus with two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, Conventionally, usually the partner performed communication by the means of communication with a common addresser whom the convenience of an usable means of communication or a partner does not understand, or the means of communication selected for the sake of his convenience.

[0003]Drawing 2 is a key map of the flow of the call from the means-of-communication selection by conventional technology. The figure (a) About the chosen place, it is [ using what means of communication when the addresser 10 communicates with the action addressee 11, it carries out, and ] the figure (b). It is the means of communication which the addresser 10 chose, and the place which indicated that the action addressee 11 has dialog volition is shown.

[0004]Drawing 2 (a) Since the addresser 10 cannot know before dispatch like about the

information which affects the degree of invasion to the action addressees 11, such as busyness of the action addressee 11, Only its convenience is considered, a means of communication is chosen, and it is the figure (b). The addresser's 10 dialog volition is expressed to the action addressee 11 as the method of displaying the addresser's 10 dialog volition which the means of communication which the addresser 10 chose has, also when the action addressee 11 is in what kind of state like.

[Problem(s) to be Solved by the Invention]Since the conventional device is constituted as mentioned above, an addresser, Although there is a more suitable means of communication, cannot but communicate using a general means of communication, or, An addresser chooses a means of communication for the sake of his convenience, without taking the state of an action addressee, etc. into consideration, When interruption is applied on the arbitrary business by arbitrary means of communication from arbitrary partners in any states and it has a means of communication of a real time system moreover chosen, an action addressee, Business could be known only after the start of a dialog, but since selection of the dialog by a destination side was not able to be performed, at the time of a busy or busy situation, the business which is not urgent was carried in for convenience' sake [ with a selfish addresser ], and there was a problem that trouble might be made to an action addressee.

[0006]In view of the above-mentioned problem, the purpose of this invention is a possible range, is making an addresser choose the most suitable means of communication, and there is in transmitting information more certainly or providing the correspondence procedure which can bar the unnecessary obstacle to an action addressee, and its device.

[0007]

[Means for Solving the Problem]This invention in order to attain the above-mentioned purpose in claim 1. In a correspondence procedure using a communication apparatus which has two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, Information on an usable means of communication is registered into a communication apparatus a priori by origination side and a destination side, An origination side obtains information on an usable means of communication in advance of dispatch of a communication content by a destination side, and a correspondence procedure which both an origination side and a destination side show an addresser information on an usable means of communication, and an addresser chooses either among shown means of communication, and was made to send a communication content is proposed.

[0008]In a communication dialog device which has several network interfaces in which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs in claim 2. A means-of-communication registration means to register information on an usable

means of communication a priori by origination side and a destination side, an origination side obtains information on an usable means of communication in advance of dispatch of a communication content through a means-of-communication registration means by a destination side — it wearing and with a side means-of-communication acquiring means. It wears and a communication apparatus which has a means-of-communication selecting means which both an origination side and a destination side show an addresser an usable means of communication, and an addresser chooses either among shown means of communication, and sends a communication content based on acquiring information of a side means-of-communication acquiring means is proposed.

# [0009]

[Function]When according to claims 1 and 2 of this invention it is in the state where it separated mutually and communicates using the means of communication of a system instancy, Everybody register the usable means of communication a priori, and an origination side can obtain the means of communication registered into incoming trunk equipment in advance of dispatch of a communication content, and by this, Both an origination side and a destination side show an addresser an usable means of communication, and though an addresser can choose either among usable means of communication, can send a communication content and avoids the obstacle to a partner's present condition, it becomes possible to communicate the purpose.

#### [0010]

[Example] Hereafter, one example of this invention is described using a drawing. [0011]Drawing 1 shows the lineblock diagram in this example, and one in a figure the means of communication which everybody use, The use means-of-communication registering part registered through here, the use means-of-communication database (DB) with which 2 holds the information on the means of communication registered by the use means-ofcommunication registering part 1, The means-of-communication integrated management department which 3 unifies \*\*\*\*\*\* by two or more means of communication registered into use means-of-communication DB2, and is managed. The \*\*\*\*\*\* user interface (UI) part used when 4 communicates using the means of communication managed in the means-of-communication integrated management department 3, 5 by taking out the signal which requires information to the device which has memorized the means of communication which the action addressee 11. has registered, and making the device transmit information needed to it, the action addressee 11 transmits the information on the means of communication registered into the device -wearing -- a side means-of-communication transmission section. The information on a means of communication usable in the \*\* side means-of-communication acquisition part which obtains the means of communication into which the addresser 10 has registered 7, and the action addressee 11 which 8 wore and came to hand by the side means-of-communication

acquisition part 5, The usable means-of-communication deduction part in which both sendingand-receiving person deduces an usable means of communication from the information on a
means of communication usable in the addresser 10 who received by the origination-side
means-of-communication acquisition part 7, 9 is a means-of-communication selecting part as
which both sending-and-receiving person deduced by the usable means-of-communication
deduction part 8 makes it choose by which means of communication it communicates by
showing the addresser 10 an usable means of communication. Each above-mentioned
formation part is provided in the origination side and the destination side.
[0012]Drawing 3 shows the communication pattern used by this example. By drawing 3,
although the addresser 10 is considering it as the wax in connection at the action addressee
11, since it may become obstructive in case of a telephone, the place which it is trying to
perform by another means of communication is shown. The addresser's 10 usable means of
communication are a telephone, a TV phone, a facsimile, and an E-mail.
The usable means of communication of the action addressee 11 are a telephone, a facsimile,
an E-mail and voice mail

[0013] Drawing 4 thru/or drawing 7 show the operation which this device takes, when communicating with the communication pattern shown in drawing 3. Drawing 4 the place which obtained the information on the means of communication which the addresser 10 has registered into the device drawing 5. It doubles with the information on the means of communication which the action addressee 11 which obtained the information on the means of communication which the addresser 10 has registered into the device, and came to hand previously has registered into the device, Drawing 7 chooses an E-mail as a means of communication for which the addresser 10 uses the place where, as for drawing 6, both sending-and-receiving person has shown the addresser 10 the usable means of communication for the place where both sending-and-receiving person deduced the usable means of communication, and shows the place where this device started the electronic mail device

[0014]That is, first, when performing communication as shown in <u>drawing 3</u>, if the addresser 10 starts a device, as shown in <u>drawing 4</u>, an origination side will wear and the side means-of-communication acquisition part 5 will obtain the information on the means of communication which the destination side wore and the action addressee 11 has registered into the device through the side means-of-communication transmission section 6 and use means-of-communication DB2. Then, as shown in <u>drawing 5</u>, the information on the means of communication which the addresser 10 has registered into the device comes to hand through use means-of-communication DB2 of an origination side, and the \*\* side means-of-communication acquisition part 7. The action addressee 11 which came to hand previously

deduces a means of communication usable in both an addresser and an action addressee by the usable means-of-communication deduction part 8 together with an usable means of communication. And as shown in drawing 6, both the addresser who deduced, and an action addressee show the addresser 10 an usable means of communication through the means-of-communication selecting part 9. A telephone, a facsimile, and an E-mail are shown in this example. As shown in drawing 7, the addresser 10 shown the usable means of communication chooses from the inside the means of communication which he wants to use by the means-of-communication selecting part 9, and performs dispatch of a communication content. Thus, the addresser 10 will transmit the target information with an E-mail.

[0015]

[Effect of the Invention]As explained above, according to the correspondence procedure of claim 1 of this invention, the prediction result of the degree of invasion to a partner, When both themselves and a partner show an addresser the most suitable means of communication and make it choose from the information about an usable means of communication, reduction of the disturbance to the present state in the communication which is not suitable is attained temporally. According to the communication apparatus of claim 2 of this invention, the correspondence procedure of claim 1 is accurately realizable.

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#### TECHNICAL FIELD

[Industrial Application] In this invention, an addresser gets to know a means of communication usable in an action addressee before dispatch of a communication content about the correspondence procedure performed using a communication apparatus with two or more network interfaces, and its device.

Therefore, it is related with the correspondence procedure which enabled it to choose the means of communication which was most suitable for the communication content which an addresser is trying to perform, and its device.

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#### PRIOR ART

[Description of the Prior Art]In the communication performed using a communication apparatus with two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, Conventionally, usually the partner performed communication by the means of communication with a common addresser whom the convenience of an usable means of communication or a partner does not understand, or the means of communication selected for the sake of his convenience.

[0003] Drawing 2 is a key map of the flow of the call from the means-of-communication selection by conventional technology. The figure (a) About the chosen place, it is [ using what means of communication when the addresser 10 communicates with the action addressee 11, it carries out, and ] the figure (b). It is the means of communication which the addresser 10 chose, and the place which indicated that the action addressee 11 has dialog volition is shown.

[0004] Drawing 2 (a) Since the addresser 10 cannot know before dispatch like about the information which affects the degree of invasion to the action addressees 11, such as busyness of the action addressee 11, Only its convenience is considered, a means of communication is chosen, and it is the figure (b). The addresser's 10 dialog volition is expressed to the action addressee 11 as the method of displaying the addresser's 10 dialog volition which the means of communication which the addresser 10 chose has, also when the action addressee 11 is in what kind of state like.

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#### EFFECT OF THE INVENTION

[Effect of the Invention] As explained above, according to the correspondence procedure of claim 1 of this invention, the prediction result of the degree of invasion to a partner, When both themselves and a partner show an addresser the most suitable means of communication and make it choose from the information about an usable means of communication, reduction of the disturbance to the present state in the communication which is not suitable is attained temporally. According to the communication apparatus of claim 2 of this invention, the correspondence procedure of claim 1 is accurately realizable.

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#### TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention]Since the conventional device is constituted as mentioned above, an addresser, Although there is a more suitable means of communication, cannot but communicate using a general means of communication, or, An addresser chooses a means of communication for the sake of his convenience, without taking the state of an action addressee, etc. into consideration, When interruption is applied on the arbitrary business by arbitrary means of communication from arbitrary partners in any states and it has a means of communication of a real time system moreover chosen, an action addressee, Business could be known only after the start of a dialog, but since selection of the dialog by a destination side was not able to be performed, at the time of a busy or busy situation, the business which is not urgent was carried in for convenience' sake [ with a selfish addresser ], and there was a problem that trouble might be made to an action addressee.

[0006]In view of the above-mentioned problem, the purpose of this invention is a possible range, is making an addresser choose the most suitable means of communication, and there is in transmitting information more certainly or providing the correspondence procedure which can bar the unnecessary obstacle to an action addressee, and its device.

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#### MEANS

[Means for Solving the Problem]This invention in order to attain the above-mentioned purpose in claim 1. In a correspondence procedure using a communication apparatus which has two or more network interfaces corresponding to several means of communication from which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs, Information on an usable means of communication is registered into a communication apparatus a priori by origination side and a destination side, An origination side obtains information on an usable means of communication in advance of dispatch of a communication content by a destination side, and a correspondence procedure which both an origination side and a destination side show an addresser information on an usable means of communication, and an addresser chooses either among shown means of communication, and was made to send a communication content is proposed.

[0008]In a communication dialog device which has several network interfaces in which classification, such as a telephone, a TV phone, a facsimile, an E-mail, and voice mail, differs in claim 2, A means-of-communication registration means to register information on an usable means of communication a priori by origination side and a destination side, an origination side obtains information on an usable means of communication in advance of dispatch of a communication content through a means-of-communication registration means by a destination side — it wearing and with a side means-of-communication acquiring means. It wears and a communication apparatus which has a means-of-communication selecting means which both an origination side and a destination side show an addresser an usable means of communication, and an addresser chooses either among shown means of communication, and sends a communication content based on acquiring information of a side means-of-communication acquiring means is proposed.

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#### OPERATION

[Function]When according to claims 1 and 2 of this invention it is in the state where it separated mutually and communicates using the means of communication of a system instancy, Everybody register the usable means of communication a priori, and an origination side can obtain the means of communication registered into incoming trunk equipment in advance of dispatch of a communication content, and by this, Both an origination side and a destination side show an addresser an usable means of communication, and though an addresser can choose either among usable means of communication, can send a communication content and avoids the obstacle to a partner's present condition, it becomes possible to communicate the purpose.

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#### DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1]The lineblock diagram showing one example of this invention

[Drawing 2]The explanatory view of communication until an action addressee gets to know the communication purpose from dispatch in conventional technology

[Drawing 3]The figure showing the operation in one example

[Drawing 4]The figure showing the operation in one example

[Drawing 5]The figure showing the operation in one example

[Drawing 6]The figure showing the operation in one example

 $[\underline{\text{Drawing 7}}]\text{The figure showing the operation in one example}$ 

[Description of Notations]

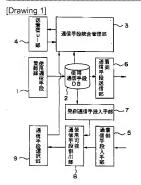
1 [-- The \*\*\*\*\*\*\* UI section, 5 / -- It wears and is a side means-of-communication acquisition part and 6. / -- It wears and is a side means-of-communication transmission section and 7. / -- A from side means-of-communication acquisition part. 8 / -- An usable means-of-

communication deduction part, 9 / -- Means-of-communication selecting part. ] -- A use means-of-communication registering part, 2 -- The use means of communication DB, 3 -- A means-of-communication integrated management department, 4

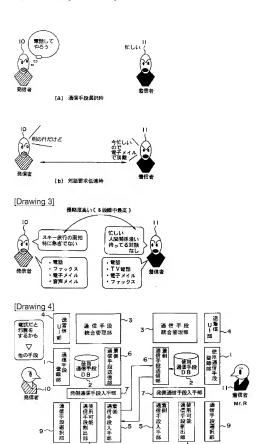
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# DRAWINGS

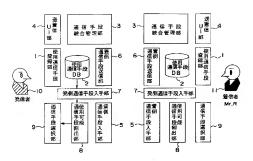


[Drawing 2]

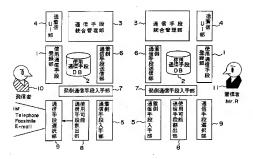


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[Drawing 5]



# [Drawing 6]



[Drawing 7]

